

*West Virginia Department of Environmental Protection  
Division of Air Quality*

Earl Ray Tomblin  
Governor

Randy C. Huffman  
Cabinet Secretary

# Permit to Operate



Pursuant to  
Title V  
of the Clean Air Act

Issued to:  
**ArcelorMittal Weirton Inc.**  
R30-02900001-2011  
Part 1 of 3

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*John A. Benedict*  
*Director*

*Issued: Draft/Proposed • Effective: Equals issue date plus two weeks  
Expiration: Five Years After Issuance Date • Renewal Application Due: 6 Months Prior to Expiration*

Permit Number: **R30-02900001-2011**  
Permittee: **ArcelorMittal Weirton Inc.**  
Permittee Mailing Address: **100 Pennsylvania Avenue, Weirton, WV 26062**

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*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

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Facility Location: Weirton, Hancock County, West Virginia  
Telephone Number: 304-797-3908  
Type of Business Entity: Corporation  
Facility Description: Steel Mill, Industrial Gases  
SIC Codes: 3312, 2813  
UTM Coordinates: 533.70 km Easting • 4474.50 km Northing • Zone 17

Permit Writer: Bobbie Scroggie

*Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.*

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*Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.*

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## 1.0 Emission Units and Active R13, R14, and R19 Permits

### 1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
089	S405	HP Boiler 3; natural gas, mixed gas, fuel oil	1940	540 mmBtu/hr	N/A
090	S406	HP Boiler 4; natural gas, mixed gas, fuel oil	1947	540 mmBtu/hr	N/A
091	S407	HP Boiler 5; natural gas, fuel oil	1952	600 mmBtu/hr	N/A
--	--	Caterpillar Emergency Generator	Pre-1995	676 HP	N/A

### 1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
N/A	

## 2.0. General Conditions

### 2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months

### 2.2. Acronyms

<b>CAAA</b>	Clean Air Act Amendments	<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants
<b>CBI</b>	Confidential Business Information	<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>CEM</b>	Continuous Emission Monitor	<b>NSPS</b>	New Source Performance Standards
<b>CES</b>	Certified Emission Statement	<b>PM</b>	Particulate Matter
<b>C.F.R. or CFR</b>	Code of Federal Regulations	<b>PM<sub>10</sub></b>	Particulate Matter less than 10µm in diameter
<b>CO</b>	Carbon Monoxide	<b>pph</b>	Pounds per Hour
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>ppm</b>	Parts per Million
<b>DAQ</b>	Division of Air Quality	<b>PSD</b>	Prevention of Significant Deterioration
<b>DEP</b>	Department of Environmental Protection	<b>psi</b>	Pounds per Square Inch
<b>FOIA</b>	Freedom of Information Act	<b>SIC</b>	Standard Industrial Classification
<b>HAP</b>	Hazardous Air Pollutant	<b>SIP</b>	State Implementation Plan
<b>HON</b>	Hazardous Organic NESHAP	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>HP</b>	Horsepower	<b>TAP</b>	Toxic Air Pollutant
<b>lbs/hr</b>	Pounds per Hour	<b>TPY</b>	Tons per Year
<b>LDAR</b>	Leak Detection and Repair	<b>TRS</b>	Total Reduced Sulfur
<b>m</b>	Thousand	<b>TSP</b>	Total Suspended Particulate
<b>MACT</b>	Maximum Achievable Control Technology	<b>USEPA</b>	United States Environmental Protection Agency
<b>mm</b>	Million	<b>UTM</b>	Universal Transverse Mercator
<b>mmBtu/hr</b>	Million British Thermal Units per Hour	<b>VEE</b>	Visual Emissions Evaluation
<b>mmft<sup>3</sup>/hr</b>	Million Cubic Feet Burned per Hour	<b>VOC</b>	Volatile Organic Compounds
<b>NA or N/A</b>	Not Applicable		
<b>NAAQS</b>	National Ambient Air Quality Standards		

### **2.3. Permit Expiration and Renewal**

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.  
**[45CSR§30-5.1.b.]**
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.  
**[45CSR§30-4.1.a.3.]**
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.  
**[45CSR§30-6.3.b.]**
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.  
**[45CSR§30-6.3.c.]**

### **2.4. Permit Actions**

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.  
**[45CSR§30-5.1.f.3.]**

### **2.5. Reopening for Cause**

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
  - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
  - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
  - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.  
**[45CSR§30-6.6.a.]**

## **2.6. Administrative Permit Amendments**

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.  
[45CSR§30-6.4.]

## **2.7. Minor Permit Modifications**

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.  
[45CSR§30-6.5.a.]

## **2.8. Significant Permit Modification**

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.  
[45CSR§30-6.5.b.]

## **2.9. Emissions Trading**

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.  
[45CSR§30-5.1.h.]

## **2.10. Off-Permit Changes**

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
  - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
  - c. The change shall not qualify for the permit shield.
  - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
  - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

**[45CSR§30-5.9]**

## **2.11. Operational Flexibility**

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

**[45CSR§30-5.8]**

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

**[45CSR§30-5.8.a.]**

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

**[45CSR§30-5.8.c.]**

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

**[45CSR§30-2.39]**

## **2.12. Reasonably Anticipated Operating Scenarios**

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.



- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
  - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
  - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.
- [45CSR§30-5.1.i.]**

## **2.13. Duty to Comply**

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- [45CSR§30-5.1.f.1.]**

## **2.14. Inspection and Entry**

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
    - a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
    - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
    - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
    - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.
- [45CSR§30-5.3.b.]**

## **2.15. Schedule of Compliance**

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
  - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

- b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

## **2.16. Need to Halt or Reduce Activity not a Defense**

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

## **2.17. Emergency**

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.  
[45CSR§30-5.7.e.]

## **2.18. Federally-Enforceable Requirements**

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.  
[45CSR§30-5.2.a.]
- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

## **2.19. Duty to Provide Information**

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.  
[45CSR§30-5.1.f.5.]

## **2.20. Duty to Supplement and Correct Information**

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.  
[45CSR§30-4.2.]

## **2.21. Permit Shield**

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.  
[45CSR§30-5.6.a.]
- 2.21.2. Nothing in this permit shall alter or affect the following:
- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
  - b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

## **2.22. Credible Evidence**

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and 45CSR38]

## **2.23. Severability**

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

## **2.24. Property Rights**

- 2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

## **2.25. Acid Deposition Control**

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

### **3.0. Facility-Wide Requirements for Part 1 of Facility**

#### **3.1. Limitations and Standards**

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1.  
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.  
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.  
[40 C.F.R. 61 and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.  
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.  
[45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.  
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.
- [40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.  
[40 C.F.R. 68]

### 3.2. Monitoring Requirements

- 3.2.1. None.

### 3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
  - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
  - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
  - d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.
2. The result of the test for each permit or rule condition.
3. A statement of compliance or non-compliance with each permit or rule condition.  
[WV Code § 22-5-4(a)(14-15), 45CSR§2-8.1., and 45CSR13]

### 3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
  - a. The date, place as defined in this permit and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of the analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.  
[45CSR§30-5.1.c.2.A.]
- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.  
[45CSR§30-5.1.c.2.B.]
- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.  
[45CSR§30-5.1.c. State-Enforceable only.]

### 3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.  
[45CSR§30-4.4. and 5.1.c.3.D.]
- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.  
[45CSR§30-5.1.c.3.E.]

- 3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class, or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**If to the DAQ:**

Director  
WVDEP  
Division of Air Quality  
601 57th Street SE  
Charleston, WV 25304  
  
Phone: 304/926-0475  
FAX: 304/926-0478

**If to the US EPA:**

Associate Director  
Office of Enforcement and Permits Review  
(3AP12)  
U. S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.  
[45CSR§30-8.]
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3\_APD\_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.  
[45CSR§30-5.3.e.]
- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.  
[45CSR§30-5.1.c.3.A.]
- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.
- 3.5.8. **Deviations.**
- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of



such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

**[45CSR§30-5.1.c.3.C.]**

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

**[45CSR§30-5.1.c.3.B.]**

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

**[45CSR§30-4.3.h.1.B.]**

### **3.6. Compliance Plan**

- 3.6.1. None.

### **3.7. Permit Shield**

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
  - a. 40 CFR Part 64 - Compliance Assurance Monitoring. There are no control devices associated with the boilers or emergency generator, therefore this portion of the facility is not subject to CAM in accordance with 40 CFR § 64.2(a)(2).
  - b. Greenhouse Gas Permitting - This is a renewal Title V permit and there have been no modifications that would have triggered a PSD permit. Therefore, there are no applicable GHG requirements.

#### **4.0. Boiler Requirements [S405, S406, S407]**

##### **4.1. Limitations and Standards**

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.  
**[45CSR§2-3.1.]**

4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the following:

<b>Emission Unit ID</b>	<b>Description</b>	<b>PM Limit</b>
089, 090, and 091	HP Boilers 3, 4, and 5	151.2 pph

**[45CSR§§2-4.1., 4.1.b., and 4.3.]**

4.1.3. The visible emission standards set forth in Section 4.1.1. of this permit shall apply at all times except in periods of start-ups, shutdowns and malfunctions.  
**[45CSR§2-9.1.]**

4.1.4. At all times, including periods of start-ups, shutdowns and malfunctions, the permittee shall, to the extent practicable, maintain and operate any fuel burning units including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.  
**[45CSR§2-9.2.]**

4.1.5. No person shall circumvent the provisions of 45CSR10 by constructing fuel burning unit(s) larger than would be necessary to provide heat and/or power for an existing manufacturing plant, with a reasonable margin for plant expansion, in order to use that design heat input to raise the allowable sulfur content in fuel.  
**[45CSR§10-3.6.]**

4.1.6. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period, the permittee shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day  
**[45CSR§10-3.8.]**

4.1.7. No owner or operator shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.  
**[45CSR§10-11.1.]**

- 4.1.8. The permittee agrees to comply with the following SO<sub>2</sub> control requirements:
- a. High Pressure Boilers 1 and 2 shall not be operated by the Company.
  - b. Low Pressure Boilers LP1, LP2, LP3, LP4, and LP15 shall not be operated by the Company.
  - c. Coal shall not be fired at any boiler operated by the Company.
  - d.
    1. SO<sub>2</sub> emissions from High Pressure Boilers 3, 4, and 5 shall be limited by restricting the firing of fuel oil to a rate dependent upon the sulfur content of the fuel oil fired as described in Appendix B. The allowable fuel oil firing rate shall be the 3-hour block average derived from Appendix B expressed in total gallons of fuel oil fired at High Pressure Boilers 3, 4, and 5 over a 3-hour block period.
    2. The percentage of sulfur contained in the fuel oil purchased to be fired at the company's high pressure boilers shall not exceed 3%.
    3. Total fuel oil and sulfur content fired at boilers 3, 4, & 5 shall be limited to the product of (gpm)\*(%S) being less than or equal to the emission factor of 91.7 as per the curve shown in Appendix B.

Compliance with these limits shall demonstrate compliance with the less stringent limitations of 45CSR§10-3.1.e.;

**[CO-SIP-C-2003-28, Conditions IV.3.(b), (c), (d), (e), and 45CSR§10-3.1.e.]**

- 4.1.9. **CAIR NO<sub>x</sub> Ozone Season Trading Program.** The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (see Appendix A) and the CAIR permit requirements set forth in 45CSR40 for each CAIR NO<sub>x</sub> Ozone Season source. The complete CAIR Permit Application shall be the CAIR Permit portion of the Title V permit administered in accordance with 45CSR30.  
**[45CSR§§40-6.1.b. and 20.1.]**

- a. The CAIR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§40-2 and, upon recordation by the Administrator under sections 51 through 57, or 60 through 62 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season allowance to or from the compliance account of the CAIR NO<sub>x</sub> Ozone Season source covered by the permit.  
**[45CSR§40-23.2.]**
- b. Except as provided in 45CSR§40-23.2, the Secretary will revise the CAIR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.  
**[45CSR§40-24.1.]**

- 4.1.10. **40 CFR Part 63, Subpart DDDDD.** The Boilers shall comply with all applicable requirements for existing affected sources, pursuant to 40 C.F.R. 63, Subpart DDDDD - "National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters" no later than the existing source compliance date of March 21, 2014, as amended by US EPA in its indefinite stay of the rule effective date. Pursuant to notice in the Federal Register the "delay of effectiveness will remain in place until the proceedings for judicial review are completed or the EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect."  
**[40 CFR Part 63, Subpart DDDDD; 76 FR 28662-28664 (May 18, 2011)]**

## **4.2. Monitoring Requirements**

- 4.2.1. The permittee shall monitor compliance with section 4.1.1. as set forth in an approved monitoring plan for each emission unit (see Appendix C).  
**[45CSR§§2-3.2. and 8.2.]**
- 4.2.2. a. At the request of the Director, the permittee shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of 45CSR10. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation.
- b. Prior to the installation of calibrated stack gas monitoring devices, sulfur dioxide emission rates shall be calculated on an equivalent fuel sulfur content basis.
- c. The permittee shall demonstrate compliance with Section 3 of 45CSR10 by testing and/or monitoring in accordance with an approved monitoring plan for each emission unit (see Appendix C).
- d. Excursions outside the range of operating parameters associated with control or process equipment which are established in an approved monitoring plan will not necessarily constitute a violation of 45CSR10.  
**[45CSR§10-8.2.]**
- 4.2.3. The owners and operators, and to the extent applicable, the CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season unit, must comply with the monitoring, recordkeeping and reporting requirements as provided in 45CSR40, sections 70 through 76 and Subpart H of 40 CFR Part 75.  
**[45CSR§40-70]**
- 4.2.4. The permittee shall monitor and record the total number of gallons of fuel oil fired at High Pressure Boilers 3, 4, and 5 over every 3-hour block time period. The Company shall maintain records of the fuel oil usage for a period of 5 years and make such records available to DEP upon request.  
**[CO-SIP-C-2003-28, Condition V.1.]**
- 4.2.5. The permittee shall require offsite suppliers of fuel oil to provide a copy of a fuel oil analysis certification from the supplier for each shipment of fuel oil received. Copies of such certifications shall be maintained by the Company for a period of 5 years and made available to the DEP upon request.  
**[CO-SIP-C-2003-28, Condition V.2.]**
- 4.2.6. The permittee shall conduct fuel oil analysis in accordance with American Society for Testing and Materials (ASTM) approved procedures and test methods to determine the sulfur content of the fuel oil fired at High Pressure Boilers 3, 4, and 5. The fuel oil analysis will be conducted each time the "as burned" fuel oil sulfur content is reasonably expected to increase by virtue of any addition of oil to the day tank used to circulate the oil to the burners. Fuel oil analysis shall be conducted at a minimum once per calendar quarter unless fuel oil is not fired for the reporting quarter. The Company shall maintain records of the fuel oil analysis for a period of 5 years and make such records available to DEP upon request.  
**[CO-SIP-C-2003-28, Condition V.3.]**

- 4.2.7. The permittee shall monitor and record the amount of natural gas and mixed gas combusted at all of the sources subject to numerical emission limits in Section 4.1.8. of this permit. The Company shall maintain records of the fuel usage for a period of 5 years and make such records available to DEP upon request.  
**[CO-SIP-C-2003-28, Condition V.4.]**

### 4.3. Testing Requirements

- 4.3.1. The permittee shall demonstrate compliance with Section 4.1.1. by periodic testing in accordance with 40 CFR Part 60, Appendix A, Method 9 and the approved monitoring plan (See Appendix C); and with Section 4.1.2. by periodic particulate matter stack testing, conducted in accordance with the appropriate test method set forth in Section 4.3.2. of this permit or other equivalent EPA approved method approved by the Director.  
**[45CSR§2-8.1.]**
- 4.3.2. The permittee shall periodically conduct or have conducted, weight emission tests to determine the compliance of the fuel burning units with the weight emission standards set forth in section 4.1.2. Weight emission tests shall be conducted in accordance with 45CSR2 Appendix "Compliance Test Procedures for 45CSR2" or other equivalent EPA approved method approved by the Director. The most recent tests were completed in February of 2009 and the test results were  $\leq 50\%$  of the weight emission standard, resulting in a testing frequency of "Once/3 years", therefore the next test shall be performed no later than February 2012. Subsequent testing shall be conducted at a frequency established in the following table:

Test	Test Results	Test Frequency
Annual	after three successive tests indicate mass emission rates $\leq 50\%$ of weight emission standard	Once/3 years
Annual	after two successive tests indicate mass emission rates $< 80\%$ of weight emission standard	Once/2 years
Annual	any test indicates a mass emission rate $\geq 80\%$ of weight emission standard	Annual
Once/2 years	after two successive tests indicate mass emission rates $\leq 50\%$ of weight emission standard	Once/3 years
Once/2 years	any test indicates a mass emission rate $< 80\%$ of weight emission standard	Once/2 years
Once/2 years	any test indicates a weight emission rates $\geq 80\%$ of weight emission standard	Annual
Once/3 years	any test indicates a mass emission rate $\leq 50\%$ of weight emission standard	Once/3 years
Once/3 years	Any test indicates a mass emission rate between 50% and 80% of weight emission standard	Once/2 years
Once/3 years	Any test indicates a mass emission rate $\geq 80\%$ of weight emission standard	Annual

**[45CSR§2-8.1., 45CSR§2A-5.2., and 45CSR§30-5.1.c.]**

4.3.3. a. The permittee may be required to conduct or have conducted tests to determine the compliance of such sources with the emission limitations of section 3 of 45CSR10. Such tests shall be conducted in accordance with the appropriate test method set forth in 40 CFR Part 60, Appendix A, Method 6, Method 15 or other equivalent EPA testing method approved by the Director. The Director, or his or her duly authorized representative, may at his or her option witness or conduct such tests. Should the Director exercise his or her option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

b. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions other than those noted in 45CSR10, section 3.

[45CSR§10-8.1.]

#### **4.4. Recordkeeping Requirements**

4.4.1. a. The permittee shall maintain on-site all records of monitored data established in the monitoring plan pursuant to Sections 4.2.1. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years. Where appropriate the permittee may maintain such records in electronic form.

[45CSR§2-8.3.a. and d., and 45CSR§10-8.3.a. and d.]

#### **4.5. Reporting Requirements**

4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.

[45CSR§2-8.3.b. and 45CSR§10-8.3.b.]

4.5.2. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following subdivisions:

a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and

2. Excess opacity does not exceed 40%.

b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in section 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The permittee shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

1. A detailed explanation of the factors involved or causes of the malfunction;

2. The date and time of duration (with starting and ending times) of the period of excess emissions;
3. An estimate of the mass of excess emissions discharged during the malfunction period;
4. The maximum opacity measured or observed during the malfunction;
5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

**[45CSR§2-9.3.]**

- 4.5.3. Duty to reapply. -- For a CAIR NO<sub>x</sub> Ozone Season source required to have a Title V operating permit, the CAIR designated representative will submit a complete CAIR permit application in accordance with 45CSR§40-22 for the source covering each CAIR NO<sub>x</sub> Ozone Season unit at the source to renew the CAIR permit in accordance with 45CSR30.

**[45CSR§40-21.2.]**

#### **4.6. Compliance Plan**

- 4.6.1. None.

## **5.0. Emergency Generator Requirements**

### **5.1. Limitations and Standards**

If you own or operate an emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed prior to June 12, 2006, you must operate the engine according to the conditions described below. If you do not operate the engine according to the requirements below, the engine will not be considered an emergency engine under 40 CFR part 63, subpart ZZZZ and will need to meet all requirements for non-emergency engines.

- a. There is no time limit on the use of emergency stationary RICE in emergency situations.
- b. You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance.
- c. You may operate your emergency stationary RICE for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

**[40 CFR § 63.6640(f)(2) and 45CSR34]**



## APPENDIX A

### CAIR Permit Application



# CAIR Permit Application

Page 1

For sources subject to the Clean Air Interstate Rule Trading Programs under 45CSR39, 45CSR40 and 45CSR41, the West Virginia Department of Environmental Protection, Division of Air Quality has prepared this CAIR Permit Application. Please refer to sections 21 and 22 of 45CSR39, 45CSR40 and 45CSR41, as applicable.

This submission is: ☒ New ☐ Revised

## STEP 1

Identify the source by plant name, and ORIS or facility code

Plant Name	Mittal Steel USA-Weirton, Inc.	West Virginia ID Number	5402900001	ORIS/Facility Code	54344
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## STEP 2

Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

Unit ID#	NO <sub>x</sub> Annual	NO <sub>x</sub> Ozone Season	SO <sub>2</sub> Annual
089		X	
090		X	
091		X	
092		X	
093		X	

## STEP 3

Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

### Standard Requirements

#### (a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) required to have a Title V operating permit and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) required to have a Title V operating permit at the source shall:

(i) Submit to the Secretary a complete CAIR permit application under 45CSR§39-22, 45CSR§40-22 and 45CSR§41-22 (as applicable) in accordance with the deadlines specified in 45CSR§39-21, 45CSR§40-21 and 45CSR§41-21 (as applicable); and

(ii) Submit in a timely manner any supplemental information that the Secretary determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) required to have a Title V operating permit and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) required to have a Title V operating permit at the source shall have a CAIR permit issued by the Secretary under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for the source and operate the source and the unit in compliance with such CAIR permit.

(3) Except as provided in sections 80 through 88 of 45CSR39, 45CSR40 and 45CSR41, the owners and operators of a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) that is not otherwise required to have a Title V operating permit and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) that is not otherwise required to have a Title V operating permit are not required to submit a CAIR permit application and to have a CAIR permit, under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for such CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) and such CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable).

STEP 3,  
continued

(b) Monitoring, reporting and recordkeeping requirements.

(1) The owners and operators and the CAIR designated representative, of each CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) at the source shall comply with the monitoring, reporting and recordkeeping requirements of sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(2) The emissions measurements recorded and reported in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) shall be used to determine compliance by each CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) with the CAIR NO<sub>x</sub> Annual emissions limitation, CAIR NO<sub>x</sub> Ozone Season emissions limitation and CAIR SO<sub>2</sub> emissions limitation (as applicable) under 45CSR§39-6.3, 45CSR§40-6.3 and 45CSR§41-6.3 (as applicable).

(c) Nitrogen oxides annual emissions requirements.

(1) As of the allowance transfer deadline for the 2009 control period and each control period thereafter, the owners and operators of each CAIR NO<sub>x</sub> Annual source and each CAIR NO<sub>x</sub> Annual unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> Annual allowances available for compliance deductions for the control period under 45CSR§39-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> Annual units at the source, as determined in accordance with sections 70 through 75 of 45CSR39.

(2) A CAIR NO<sub>x</sub> Annual unit shall be subject to the requirements under 45CSR§39-6.3.a for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR39, and for each control period thereafter.

(3) A CAIR NO<sub>x</sub> Annual allowance shall not be deducted, for compliance with the requirements under 45CSR§39-6.3.a, for the control period in a calendar year before the year for which the CAIR NO<sub>x</sub> Annual allowance was allocated.

(4) CAIR NO<sub>x</sub> Annual allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR39.

(5) A CAIR NO<sub>x</sub> Annual allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Annual Trading Program. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§39-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO<sub>x</sub> Annual allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 40 through 62, and 80 through 88 of 45CSR39, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Annual allowance to or from a CAIR NO<sub>x</sub> Annual source's compliance account is incorporated automatically in any CAIR permit of the source.

(d) Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for the 2009 ozone season and each ozone season thereafter, the owners and operators of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> Ozone Season allowances available for compliance deductions for the ozone season under 45CSR§40-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the ozone season from all CAIR NO<sub>x</sub> Ozone Season units at the source, as determined in accordance with sections 70 through 75 of 45CSR40.

(2) A CAIR NO<sub>x</sub> Ozone Season unit shall be subject to the requirements under 45CSR§40-6.3.a for the ozone season starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, 70.2.c or 70.2.g of 45CSR40 and for each ozone season thereafter.

(3) A CAIR NO<sub>x</sub> Ozone Season allowance shall not be deducted, for compliance with the requirements under 45CSR§40-6.3.a, for an ozone season in a calendar year before the year for which the CAIR NO<sub>x</sub> Ozone Season allowance was allocated.

(4) CAIR NO<sub>x</sub> Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR40.

(5) A CAIR NO<sub>x</sub> Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Ozone Season Trading Program. No provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§40-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO<sub>x</sub> Ozone Season allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subdivision 43.3, sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season allowance to or from a CAIR NO<sub>x</sub> Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

(e) Sulfur dioxide annual emission requirements.

(1) As of the allowance transfer deadline for the 2010 control period and each control period thereafter, the owners and operators of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO<sub>2</sub> allowances available for compliance deductions for the control period, as determined in accordance with subsections 54.1 and 54.2 of 45CSR§41 in an amount not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance with sections 70 through 75 of 45CSR41.

(2) A CAIR SO<sub>2</sub> unit shall be subject to the requirements under 45CSR§41-6.3.a for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR41 and for each control period thereafter.

(3) A CAIR SO<sub>2</sub> allowance shall not be deducted, for compliance with the requirements under 45CSR§41-6.3.a, for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.

(4) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with sections 51 through 62, and 80 through 88 of 45CSR41.

(5) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§41-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR SO<sub>2</sub> allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> source's compliance account is incorporated automatically in any CAIR permit of the source.

STEP 3,  
continued

(f) Excess emissions requirements.

(1) If a CAIR NO<sub>x</sub> Annual source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> Annual emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO<sub>x</sub> Annual unit at the source shall surrender the CAIR NO<sub>x</sub> Annual allowances required for deduction under 45CSR§39-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR39, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(2) If a CAIR NO<sub>x</sub> Ozone Season source emits nitrogen oxides during any ozone season in excess of the CAIR NO<sub>x</sub> Ozone Season emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall surrender the CAIR NO<sub>x</sub> Ozone Season allowances required for deduction under 45CSR§40-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR40, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(3) If a CAIR SO<sub>2</sub> source emits sulfur dioxide during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, then:

(i) The owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> allowances required for deduction under 45CSR§41-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR41, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(g) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Secretary or the Administrator.

(i) The certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable), provided that to the extent that sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable) including those under sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(h) Liability.

(1) Each CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) and each NO<sub>x</sub> unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable).

(2) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program or CAIR SO<sub>2</sub> Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source or CAIR SO<sub>2</sub> source (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source or CAIR SO<sub>2</sub> source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> Annual units, CAIR NO<sub>x</sub> Ozone Season units or CAIR SO<sub>2</sub> units (as applicable) at the source.

(3) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program or CAIR SO<sub>2</sub> Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> Annual unit, CAIR SO<sub>2</sub> unit or CAIR NO<sub>x</sub> Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit or CAIR SO<sub>2</sub> unit (as applicable) shall also apply to the owners and operators of such unit.

(i) Effect on Other Authorities.

No provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under 45CSR§39-5, 45CSR§40-5, or 45CSR§41-5 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) or CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

MITTAL STEEL USA - WEIRTON, INC.  
Plant Name

CAIR Permit Application  
Page 4

STEP 3,  
continued

**Certification**

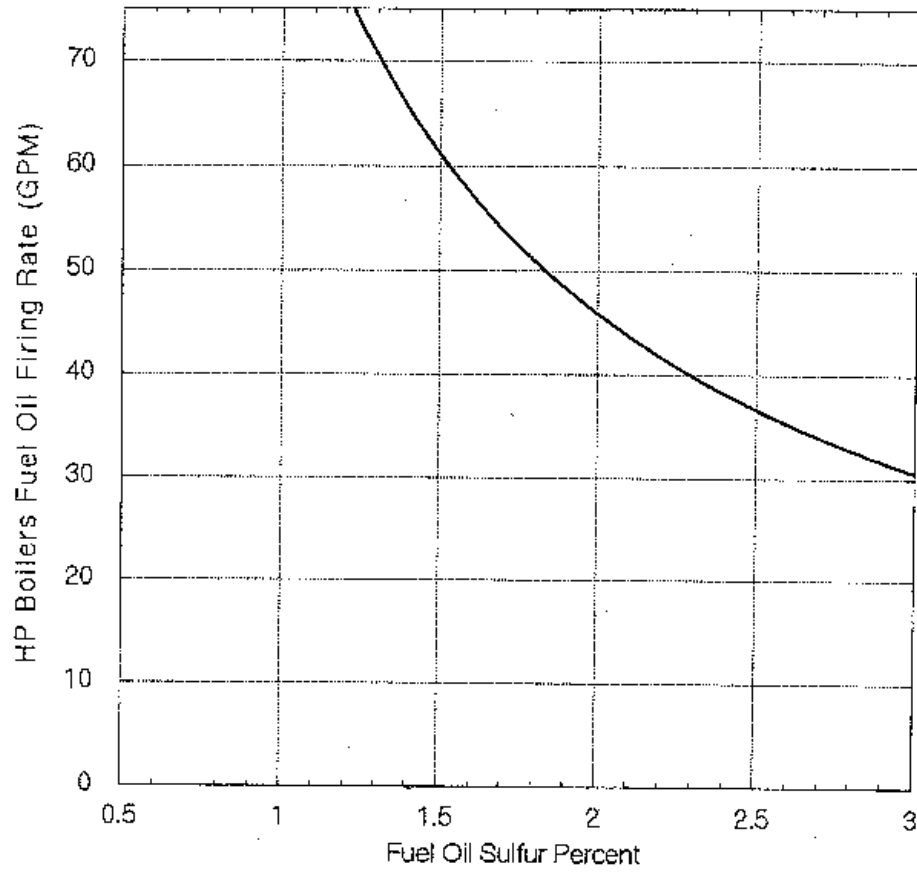
I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

CAIR Designated Representative <i>CLARK A. FRANCY</i>	
Signature <i>Clark A Francy</i>	Date <i>June 27, 2007</i>

## APPENDIX B

Consent Order Graph of Fuel Firing Rate vs. % Sulfur

$$\text{GPM} = 91.7 * (1/\text{Sulfur Percent})$$



## APPENDIX C

### Rule 2 and 10 Monitoring Plans



PROPOSED  
MONITORING & RECORDKEEPING PLANS  
FOR PARTICULATE SOURCES  
UNDER 45 CSR 2  
AT WEIRTON STEEL CORPORATION  
WEIRTON, WEST VIRGINIA

FEBRUARY 2001  
(Revised August 2001)

**(a) Regulatory Requirement**

In accordance with 45 CSR 2 §8.2.a, the following is the proposed plan for monitoring compliance with the opacity standards set forth in 45 CSR 2 §3.

**(b) Facility Information:**

Facility Name: Weirton Steel Corporation

Facility Address: Weirton Steel Corporation  
400 Three Springs Drive  
Weirton, West Virginia 26062

Facility Contact: Clark Francy  
(724) 797-3908

Facility Description:

Weirton Steel Corporation is an integrated steel mill.

It is located in the City of Weirton, Hancock County, West Virginia.

Operations include:

- Iron Making
- Steel Making
- Steel Rolling, Finishing and Coating

**(c) Affected Units**

Units which are regulated by 45 CSR 2 are Fuel Burning Units as defined in 45 CSR 2, §2.10. The specific units affected are the facility's boilers No.'s 3, 4, 5, 101 and 102. (Boiler #2 is currently inactive, but would be added to this plan prior to being brought on-line.)

All Units are in excess of 250 mmBtu/hr of designated heat input (DHI).

Units 101 and 102 share a combined stack.

All boilers currently burn natural gas, mixed gas (dilute natural gas - 70%), blast furnace gas, fuel oil or a mixture of these fuels. Natural gas and mixed gas would be exempt from monitoring requirements (45 CSR 2A §3.1.a). The facility's boilers have a history of demonstrated compliance with the opacity regulations based upon Method 9 observations and compliance inspections. Therefore, the boilers should not require continuous opacity monitors (COMs) (45 CSR 2A §6.2.a.1).

Boilers #3 and 4 can also burn coal. Currently, coal is considered a back-up fuel and has not been used for some time. Until coal is burned, the installation of a COM on either of these boilers would provide no environmental benefit and therefore, installation of a COM would be an undue economic burden on the facility. Weirton has no current plans to use coal in these boilers, but wants to maintain this capability. To this end, Weirton Steel would submit for approval a revised particulate monitoring plan prior to burning coal in these boilers. With this understanding, Weirton is requesting an exemption from installing continuous emission monitors on these boilers under 45 CSR 2A §6.2b unless coal is used.

#### **(d) Monitoring Methods**

Monitoring will be performed on each of the affected sources per the attached "Source Summary Table".

#### **(e) Reporting, Recordkeeping and Operating Parameters**

Per the requirements of 45 CSR 2A §7.1a, records shall be maintained noting operating schedule, and the quality and quantity of fuel burned.

Operating schedule records for each boiler shall include:

- Date and time of start-up and shutdown
- Monthly quantity and type of fuel burned

Fuel Quality

- Annual supplier BTU analysis for natural gas and mixed gas (70% natural gas/30% make-up air)
- Summaries from average BTU content of Blast furnace gas from continuous monitors
- Shipment BTU and ash analysis for Fuel Oil

Operating Parameters

Per the requirements of 45 CSR 2A §6.3.a.2. - 3.a.6. Weirton will:

- Use video cameras to permit boiler operators to continually observe the stacks for boilers #3, #4, and #5 for smoke or other visual emissions while the boiler is in operation. (Fuel oil is used in these boilers and the cameras provide a means to ensure that changes in fuel oil/gas feed rate and mixture will not result in visible emissions. Cameras were not installed on boilers #101 and #102 due to limited variability in fuel make-up and compliance history.)
- If operators observe any visual emissions, proper adjustments to fuel feed rate, firing air and/or other relevant operating inputs will be made.
- If changes in operating inputs fail to correct the observed visual emissions, then the monitoring plan's excursion plan will be implemented.

The use of video cameras to permit stack observations was chosen to meet the requirements of 45 CSR 2A §6.3.a.5 based upon:

- This approach is more thorough than monitoring other possible operating inputs.
- The type of fuels used.
- The compliance history of these units.

The operating range, any visible emissions, was chosen based upon:

- Current operating practices
- Type of fuels used.
- Compliance history.

All records will be maintained for a period of 5 years.

#### **(f) Excursion Response Plan**

If after a period of one hour visible emissions are still present, a Method 9 shall be performed for a minimum of 6 minutes for each hour until 4 successive six-minute observations demonstrate compliance.

For periods over one hour where visible emissions are observed, but proper conditions do not exist for Method 9 observations:

- The time when visible emissions were first observed will be recorded.

- The time when visible emissions were no longer apparent will be recorded.
- A Method 9 shall be performed when proper conditions are available, unless waived by the West Virginia Department of Environmental Protection.

Records of all excursion information will be maintained for a period of 5 years.

**(g) Monitoring Summary and Excursion and Monitoring Plan Performance Reports**

Per the requirements of 45 CSR 2A §7.2.c, the Monitoring Summary and Excursion and Monitoring Plan Performance Report shall be submitted to the Director on a quarterly basis except when the total percent of excursions is less than 1% and the total number of missing readings is less than 5%. Then, per 45 CSR 2A §7.2.c.1-2, the Excursion and Monitoring Plan Performance Report will be maintained on-site and shall be submitted to the Director upon request. All reports shall be postmarked by the thirtieth day following the end of each calendar quarter.

The Monitoring Summary Report will include for each source:

- Number of Operating Days
- Quantity and type of fuel used (where applicable)

The Excursion and Monitoring Plan Performance Report will:

- The date, time (starting and ending) and magnitude of each excursion. Identification of excursions occurring during start-ups, shutdowns and malfunctions
- The nature and cause of any excursion (if known), and the corrective action and preventative measures adopted (if any)
- The date and time when data is unavailable and the corrective action taken
- A statement noting when there are no excursions or periods of data unavailability

**(h) Implementation Plan**

Upon approval of this monitoring plan or any subsequent revisions to the plan, an implementation period is necessary to properly commence required testing, data gathering, monitoring, recordkeeping and reporting. The reporting and recordkeeping systems described in the plan require sixty days from the receipt of the final plan approval for implementation

Any modification to this plan requires the implementation schedule be reviewed and properly amended. Modifications are any changes to the submitted plan and include but are not limited to variations in monitoring or tracking methodology, additional instrumentation or other capital improvements, and/or additional requests or conditions.

**WEIRTON STEEL CORPORATION  
SOURCE SUMMARY TABLE**

<b>Emission Unit ID</b>	<b>Source</b>	<b>DHI (mmBtu/hr)</b>	<b>FUEL(s)</b>	<b>Applicable Standard</b>	<b>Proposed Monitoring</b>	<b>Frequency</b>
089	Boiler #3	540	<ul style="list-style-type: none"> <li>▪ Mixed Gas</li> <li>▪ BF Gas</li> <li>▪ N Gas</li> <li>▪ Fuel Oil</li> <li>▪ Coal</li> </ul>	10% opacity 6 min. block avg. per 45 CSR 2 §3.1	1. Method 9 2. Stack video cameras 3. Revised & approved Plan if coal is used	1. Monthly 2. Continuously 3. As needed
090	Boiler #4	540	<ul style="list-style-type: none"> <li>▪ Mixed Gas</li> <li>▪ BF Gas</li> <li>▪ N Gas</li> <li>▪ Fuel Oil</li> <li>▪ Coal</li> </ul>	10% opacity 6 min. block avg. per 45 CSR 2 §3.1	1. Method 9 2. Stack video cameras 3. Revised & approved Plan if coal is used	1. Monthly 2. Continuously 3. As needed
091	Boiler #5	600	<ul style="list-style-type: none"> <li>▪ BF Gas</li> <li>▪ N Gas</li> <li>▪ Fuel Oil</li> </ul>	10% opacity 6 min. block avg. per 45 CSR 2 §3.1	1. Method 9 2. Stack video cameras	1. Monthly 2. Continuously
092	Boilers #101 & 102	1050 (total) 525 (each)	<ul style="list-style-type: none"> <li>▪ BF Gas</li> <li>▪ N Gas</li> </ul>	10% opacity 6 min. block avg. per 45 CSR 2 §3.1	1. Method 9	1. Monthly

**WEIRTON STEEL CORPORATION  
FUEL SUMMARY TABLE**

<b>Fuel Type</b>	<b>Related Monitoring Requirement</b>	<b>Citation</b>
Natural Gas (N gas)	Exempt from monitoring	45 CSR 2A §3.1.a
Mixed Gas 70% natural gas/30% air	Exempt from monitoring	45 CSR 2A §3.1.a
BF Gas (Blast Furnace Gas) Process Generated Gas	Demonstrated compliance - COM not required	45 CSR 2A §6.2.a.1
Coal	Exemption requested from COMS requirement due to economic hardship - Coal is currently a back-up fuel (monitoring plan to be revised for increased coal use)	45 CSR 2A §6.2.b
Fuel Oil	Demonstrated compliance - COM not required	45 CSR 2A §6.2.a.1

PROPOSED  
MONITORING & RECORDKEEPING PLANS  
FOR SULFUR OXIDE SOURCES  
UNDER 45 CSR 10  
AT WEIRTON STEEL CORPORATION  
WEIRTON, WEST VIRGINIA

FEBRUARY 2001

**(a) Regulatory Requirement**

In accordance with 45 CSR 10 §8.2.c, the following is the proposed plan for monitoring compliance with the sulfur dioxide weight emissions standards expressed in 45 CSR 10 §3, 4 and 5.

**(b) Facility Information**

Facility Name: Weirton Steel Corporation

Facility Address: Weirton Steel Corporation  
400 Three Springs Drive  
Weirton, West Virginia 26062

Facility Contact: Clark Francy  
(724) 797-3908

Facility Description:

Weirton Steel Corporation is an integrated steel mill.

It is located in the City of Weirton, Hancock County, West Virginia.

Operations include:

- Iron Making
- Steel Making
- Steel Rolling, Finishing and Coating

**(c) Affected Units**

Units which are regulated by 45 CSR 10 are Fuel Burning Units as defined in 45 CSR 10 §2.8 and Manufacturing Process as defined in 45 CSR 10 §2.11 and Combustion Sources as defined in 45 CSR 10A §6.3.

Those units which are solely fueled by natural gas are exempt from the requirements of 45 CSR 10 § 8 and therefore are not included in this plan. (45 CSR 10 § 10.3 & 45 CSR 10A §3.1.b)

The specific units affected are:

**Fuel Burning Units**

- #3 Boiler
- #4 Boiler
- #5 Boiler
- #101 and # 102 Boilers (common stack)

**Manufacturing process units**

- No. 1 Blast Furnace Stoves (#1, #2, #3 - Combined Stack)
- No. 4 Blast Furnace Stoves (#11, #12, #13 - Combined Stack, #14 - Separate Stack)
- No. 2 Blast Furnace Flare (Receives gas from No. 1)
- No. 4 Blast Furnace Flare
- No. 1 Blast Furnace Slag Granulator



There is no combustion associated with the No. 1 Blast Furnace Slag Granulator. The sulfur dioxide emissions are generated from residual sulfur compounds in the slag. All other manufacturing process sources are also combustion sources.

#### **Combustion Units**

The following units are also fueled with process gas from blast furnace operations and in addition to being a fuel burning unit or manufacturing process unit are also defined as a combustion unit per 45 CSR 10A §6.3. These units are:

- #3 Boiler
- #4 Boiler
- #5 Boiler
- #101 and # 102 Boilers (common stack)
- No. 1 Blast Furnace Stoves (#1, #2, #3 - Combined Stack)
- No. 4 Blast Furnace Stoves (#11, #12, #13 - Combined Stack, #14 - Separate Stack)
- No. 2 Blast Furnace Flare (Receives gas from No. 1)
- No. 4 Blast Furnace Flare

#### **(d) Proposed Monitoring**

##### **Boiler #3, Boiler #4**

Fuels used in these units are natural gas, mixed gas (70% natural gas/30% make-up air), blast furnace gas, fuel oil or coal. These units are both fuel burning units and combustion units.

Stream sampling has shown that the blast furnace process gas which is burned contains less than 45 grains of H<sub>2</sub>S per 1000 cubic feet. Per 45 CSR 10A § 6.3.b, "The owner or operator of a combustion source(s) which has a refinery process gas stream or any other process gas stream that contains an average hydrogen sulfide concentration greater than or equal to 45 grains per 100 cubic feet shall use CEMs to satisfy the requirements of an approved monitoring plan. Therefore, CEMs are not required as part of the monitoring plan for these units.

Boilers #3 and 4 can also burn coal. Currently, coal is considered a back-up fuel and has not been used for some time. Weirton has no current plans to use coal in these boilers, but wants to maintain this capability. To this end, coal usage is not considered in this monitoring plan. However, Weirton Steel would submit for review and approval a revised monitoring plan prior to burning coal in these boilers.

The proposed monitoring plan for these units will be to assume that all sulfur compounds are converted to sulfur dioxide. Weirton Steel Corporation controls sulfur dioxide emissions by controlling fuel sulfur concentration and the quantity of the fuels used. The sulfur concentration for the various fuels will be determined as follows:

- Natural Gas and Mixed Gas - the sulfur content provided by the supplier will be used.
- Fuel Oil - the sulfur concentration provided on the manufacturer's certificate of analysis or product specifications will be utilized for the daily "as burned" fuel analysis. Received fuel oil shipments are approximately 2.5 million gallons and last approximately 2 months. Sulfur concentrations will be adjusted upon receipt of additional shipments on an average basis.
- Blast furnace Gas - is significantly lower in sulfur than the 45 grains per 100 cubic feet noted in the regulation requiring a CEM. In addition sampling and analysis are not easily

performed. Annual sulfur analysis will be performed for two consecutive years and used to establish sulfur concentration in this fuel.

- Coal - is currently considered a back-up fuel and has not been used recently. Prior to using coal, this portion of the monitoring plan will be amended and the entire plan resubmitted for approval.

#### Reporting, Recordkeeping and Operating Parameters

Per the requirements of 45 CSR 10A §7.1, records shall be maintained noting operating schedule, and the quality and quantity of fuel burned.

Operating schedule records for each boiler shall include:

- Date of start-up and shutdown
- Daily quantity and type of fuel burned

Fuel Quality

- Natural gas and resulting mixed gas (70% natural gas/30% make-up air) - annual supplier provided BTU and sulfur analysis.
- Blast furnace gas - established analysis, as described above, from an outside certified laboratory.
- Fuel Oil - Shipment BTU and sulfur analysis as provided by the supplier.
- Coal - Shipment BTU and sulfur analysis as provided by the supplier.

#### **Boiler #5**

Fuels used in this unit are natural gas, mixed gas (70% natural gas/30% make-up air), blast furnace gas and/or fuel oil. This unit is both a fuel burning unit and a combustion unit.

Stream sampling has shown that the blast furnace process gas which is burned contains less than 45 grains of H<sub>2</sub>S per 1000 cubic feet. Per 45 CSR 10A § 6.3.b, "The owner or operator of a combustion source(s) which has a refinery process gas stream or any other process gas stream that contains an average hydrogen sulfide concentration greater than or equal to 45 grains per 100 cubic feet shall use CEMs to satisfy the requirements of an approved monitoring plan. Therefore, CEMs are not required as part of the monitoring plan for these units.

The proposed monitoring plan for these units will be to assume that all sulfur compounds are converted to sulfur dioxide. Weirton Steel Corporation controls sulfur dioxide emissions by controlling fuel sulfur concentration and the quantity of the fuels used. The sulfur concentration for the various fuels will be determined as follows:

- Natural Gas and Mixed Gas - the sulfur content provided by the supplier will be used.
- Fuel Oil - the sulfur concentration provided on the manufacturer's certificate of analysis or product specifications will be utilized for the daily "as burned" fuel analysis. Received fuel oil shipments are approximately 2.5 million gallons and last approximately 2 months. Sulfur concentrations will be adjusted upon receipt of additional shipments on an average basis.
- Blast furnace Gas - is significantly lower in sulfur than the 45 grains per 100 cubic feet noted in the regulation requiring a CEM. In addition sampling and analysis are not easily performed. Annual sulfur analysis will be performed for two consecutive years and used to establish sulfur concentration in this fuel.

#### Reporting, Recordkeeping and Operating Parameters

Per the requirements of 45 CSR 10A §7.1, records shall be maintained noting operating schedule, and the quality and quantity of fuel burned.

Operating schedule records for each boiler shall include:

- Date of start-up and shutdown
- Daily quantity and type of fuel burned

Fuel Quality

- Natural gas and resulting mixed gas (70% natural gas/30% make-up air) - annual supplier provided BTU and sulfur analysis.
- Blast furnace gas - established analysis, as described above, from an outside certified laboratory.
- Fuel Oil - Shipment BTU and sulfur analysis as provided by the supplier.

#### **Boiler #101 and Boiler #102**

Fuels used in these units are natural gas and blast furnace gas. These units are fuel burning units and combustion units.

Stream sampling has shown that the blast furnace process gas which is burned contains less than 45 grains of H<sub>2</sub>S per 1000 cubic feet. Per 45 CSR 10A § 6.3.b, "The owner or operator of a combustion source(s) which has a refinery process gas stream or any other process gas stream that contains an average hydrogen sulfide concentration greater than or equal to 45 grains per 100 cubic feet shall use CEMs to satisfy the requirements of an approved monitoring plan. Therefore, CEMs are not required as part of the monitoring plan for these units.

The proposed monitoring plan for these units will be to assume that all sulfur compounds are converted to sulfur dioxide. Weirton Steel Corporation controls sulfur dioxide emissions by controlling fuel sulfur concentration and the quantity of the fuels used. The sulfur concentration for the various fuels will be determined as follows:

- Natural Gas and Mixed Gas - the sulfur content provided by the supplier will be used.
- Blast furnace Gas - is significantly lower in sulfur than the 45 grains per 100 cubic feet noted in the regulation requiring a CEM. In addition sampling and analysis are not easily performed. Annual sulfur analysis will be performed for two consecutive years and used to establish sulfur concentration in this fuel.

#### Reporting, Recordkeeping and Operating Parameters

Per the requirements of 45 CSR 10A §7.1, records shall be maintained noting operating schedule, and the quality and quantity of fuel burned.

Operating schedule records for each boiler shall include:

- Date of start-up and shutdown
- Daily quantity and type of fuel burned

Fuel Quality

- Natural gas - annual supplier provided BTU and sulfur analysis.
- Blast furnace gas - established analysis, as described above, from an outside certified laboratory.

### **No. 1 Blast Furnace Stoves (3) and No. 4 Blast Furnace Stoves (4)**

Fuels used in these units are natural gas and blast furnace gas. These units are manufacturing process units and combustion units.

Stream sampling has shown that the blast furnace process gas which is burned contains less than 45 grains of H<sub>2</sub>S per 1000 cubic feet. Per 45 CSR 10A § 6.3.b, "The owner or operator of a combustion source(s) which has a refinery process gas stream or any other process gas stream that contains an average hydrogen sulfide concentration greater than or equal to 45 grains per 100 cubic feet shall use CEMs to satisfy the requirements of an approved monitoring plan. Therefore, CEMs are not required as part of the monitoring plan for these units.

The proposed monitoring plan for these units will be to assume that all sulfur compounds are converted to sulfur dioxide. Weirton Steel Corporation controls sulfur dioxide emissions by controlling fuel sulfur concentration and the quantity of the fuels used. The sulfur concentration for the various fuels will be determined as follows:

- Natural Gas and Mixed Gas - the sulfur content provided by the supplier will be used.
- Blast furnace Gas - is significantly lower in sulfur than the 45 grains per 100 cubic feet noted in the regulation requiring a CEM. In addition sampling and analysis are not easily performed. Annual sulfur analysis will be performed for two consecutive years and used to establish sulfur concentration in this fuel.

#### Reporting, Recordkeeping and Operating Parameters

Per the requirements of 45 CSR 10A §7.1, records shall be maintained noting operating schedule, and the quality and quantity of fuel burned.

Operating schedule records for each boiler shall include:

- Daily quantity and type of fuel burned

Fuel Quality

- Natural gas and resulting mixed gas (70% natural gas/30% make-up air) - annual supplier provided BTU and sulfur analysis.
- Blast furnace gas - established analysis, as described above, from an outside certified laboratory.

### **No. 2 Blast Furnace Flare and No. 4 Blast Furnace Flare**

Excess blast furnace gas is burned in these units. These units are manufacturing process units and combustion units.

Stream sampling has shown that the blast furnace process gas which is burned contains less than 45 grains of H<sub>2</sub>S per 1000 cubic feet. Per 45 CSR 10A § 6.3.b, "The owner or operator of a combustion source(s) which has a refinery process gas stream or any other process gas stream that contains an average hydrogen sulfide concentration greater than or equal to 45 grains per 100 cubic feet shall use CEMs to satisfy the requirements of an approved monitoring plan. Therefore, CEMs are not required as part of the monitoring plan for these units.

The proposed monitoring plan for these units will be to assume that all sulfur compounds are converted to sulfur dioxide. Weirton Steel Corporation controls sulfur dioxide emissions by controlling fuel sulfur

concentration and the quantity of the fuels used. The sulfur concentration for the various fuels will be determined as follows:

- Blast furnace Gas - is significantly lower in sulfur than the 45 grains per 100 cubic feet noted in the regulation requiring a CEM. In addition sampling and analysis are not easily performed. Annual sulfur analysis will be performed for two consecutive years and used to establish sulfur concentration in this fuel.

#### Reporting, Recordkeeping and Operating Parameters

Per the requirements of 45 CSR 10A §7.1, records shall be maintained noting operating schedule, and the quality and quantity of fuel burned.

Operating schedule records for each boiler shall include:

- Daily quantity and type of fuel burned

Fuel Quality

- Natural gas and resulting mixed gas (70% natural gas/30% make-up air) - annual supplier provided BTU and sulfur analysis.
- Blast furnace gas - established analysis, as described above, from an outside certified laboratory.

### **No. 1 Blast Furnace Slag Granulator**

The emissions based upon previous testing are significantly below the allowable level under this unit's operating permit. Weirton Steel Corporation does not believe a CEM is appropriate means to measure sulfur dioxide emissions from this source.

Weirton Steel Corporation proposes stack testing, at no more frequent than 5 year intervals, instead of a CEM per 45 10A CSR §6.2.b.1 for the following reasons:

- High moisture concentrations in the exhaust stream result in extreme operational and maintenance issues for a CEM.
- Intermittent operation does not support the use of a CEM in this service.
- The current condition of the steel industry would make the installation of a CEM for this service a severe financial hardship for this facility.

#### Reporting, Recordkeeping and Operating Parameters

There are no specific reporting requirements in 45 CSR 10A §7.1 for this type of source. For this source, Weirton Steel Corporation will maintain operating schedule records which shall include:

- Date and time of start-up and shutdown

### **(e) Monitoring Plan Recordkeeping**

All applicable records shall be kept for a period of five years.

### **(f) Excursion Response Plan**

Weirton Steel Corporation controls sulfur dioxide emissions by controlling fuel sulfur concentration and the quantity of the fuels used. Operating ranges for each boiler is established based upon fuel sulfur concentrations and the quantity used.

Fuels with excessive sulfur concentrations are reviewed and rejected when necessary. Changes of sulfur concentration can impact the quantity of fuel used. If upon review, an excursion is discovered, the fuel usage rate or sulfur concentrations will be adjusted appropriately.

**(g) Monitoring Summary and Excursion and Monitoring Plan Performance Reports**

Per the requirements of 45 CSR 10A §7.2.b, the Monitoring Summary and Excursion and Monitoring Plan Performance Report shall be submitted to the Director on a quarterly basis except when the total percent of excursions is less than 4% and the total number of missing readings is less than 5%. Then, per 45 CSR 10A 7.2.b.2-3, the Excursion and Monitoring Plan Performance Report will be maintained on-site and shall be submitted to the Director upon request. All reports shall be postmarked by the thirtieth day following the end of each calendar quarter.

The Monitoring Summary Report will include for each source:

- Total Sulfur dioxide emissions for the quarter
- Number of Operating Days
- Quantity and type of fuel used (where applicable)
- Average BTU and sulfur content of each fuel used (where applicable)

The Excursion and Monitoring Plan Performance Report will:

- The date, time (starting and ending) and magnitude of each excursion
- Identification of excursions occurring during start-ups, shutdowns and malfunctions
- The nature and cause of any excursion (if known), and the corrective action and preventative measures adopted (if any)
- The date and time when data is unavailable and the reason data is unavailable and the corrective action taken
- A statement noting when there are no excursions or periods of data unavailability